

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

November 26, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Peter Minderman  
Director of Design Engineering  
John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

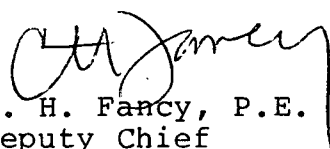
Dear Mr. Minderman:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to construct a hot water generator at the VAB Annex building at Kennedy Space Center.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Brevard County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

  
C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management

CHF/WH/ks

Attachments

cc: Charles Collins

State of Florida  
Department of Environmental Regulation  
Notice of Proposed Agency Action  
on Permit Application

The Department gives notice of its intent to issue a permit to the Kennedy Space Center to authorize construction of a hot water generator.

The 25 million Btu/hr hot water generator will replace an existing 13.7 million Btu/hr generator. The generator will burn No. 6 fuel oil with a maximum sulfur content of one percent (1.0%). A Best Available Control Technology (BACT) determination was not required for this project.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administrative, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida, 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application, technical evaluation, and Department's intent for the proposed project are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

Dept. of Environmental Regulation  
St. Johns River District  
3319 Maguire Blvd.  
Suite 232  
Orlando, Florida 32803

Dept. of Environmental  
Regulation  
Bureau of Air Quality  
Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Clair Fancy at the Department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the Department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION  
MODEL RULES OF PROCEDURE  
CHAPTER 28-5  
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
  - (a) The name and address of each agency affected and each agency's file or identification number, if known;
  - (b) The name and address of the petitioner or petitioners;
  - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
  - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
  - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
  - (f) A demand for the relief to which the petitioner deems himself entitled; and
  - (g) Such other information which the petitioner contends is material.

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of an )  
Application for Permit by )  
 )  
Kennedy Space Center ) DER File No. AC 05-093501  
Headquarters Bldg. )  
Kennedy Space Center, Florida )  
32899 )

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, John F. Kennedy Space Center, applied on September 20, 1984, to the Department of Environmental Regulation for a permit to construct a 25 million Btu per hour hot water generator at the Kennedy Space Center in Brevard County.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

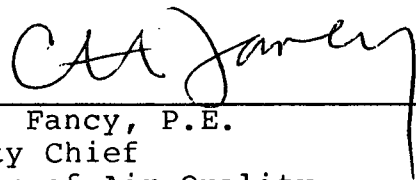
Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witness and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exception to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 30 day of November, 1984, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



---

C. H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality  
Management

Copies furnished to:  
Charles Collins

Preliminary Determination  
and  
Technical Evaluation

Kennedy Space Center, NASA  
Hot Water Generator

Kennedy Space Center, Brevard County

Permit Number:  
AC 05-093501

Florida Department of Environmental Regulation  
Bureau of Air Quality Management  
Central Air Permitting

November 27, 1984



## I. Applicant and Source Location

### A. Applicant

Kennedy Space Center, NASA  
Headquarters Building  
Kennedy Space Center, Florida 32899

### B. Source Location

The proposed construction will occur at the VAB Annex building at Kennedy Space Center, which is located in Brevard County, Florida. The UTM coordinates are: Zone 17, 611.65 km east and 1554.0 km north.

## II. Project Description

The proposed hot water generator (25 million Btu/hr heat input) will replace the existing generator (No. 2, 13.7 million Btu/hr heat input). Both units are No. 6 oil-fired generators.

Unit No. 2 is one of three existing oil-fired generators at Kennedy Space Center (KSC). Presently, the normal schedule involves the continuous operation of one 13.7 million Btu/hr generator and the operation of a second 13.7 million Btu/hr generator most of the time to meet heating demands. The third generator, a 12.5 million Btu/hr unit, serves as a standby and is utilized during maintenance of generators No. 1 and 2.

It is anticipated that the new 25 million Btu/hr unit will provide sufficient heat output so that only one unit will be in operation most of the time. The smaller No. 3 generator will be utilized to provide additional heat output to supplement the larger 25 million Btu/hr unit.

The new hot water generator will be state of the art design with improved thermal efficiency. This unit will have modern burners with more efficient atomization and therefore less air requirements. This project will result in a more efficient facility operation with decreased annual fuel consumption and lower emissions than the existing facility.

## III. Air Emissions

The air pollutants from the proposed generator will be sulfur dioxide, nitrogen oxides, particulate, and carbon monoxide. The maximum sulfur content of the oil fuel will be one percent (1.0%). The maximum air emissions from the unit will be as follows:

<u>Pollutant</u>	<u>lb/hr</u>	<u>lb/hr (Avg.)</u>	<u>ton/yr</u>
Sulfur Dioxide (SO <sub>2</sub> )	25.9	11.7	52.5
Nitrogen Oxide (NO <sub>x</sub> )	9.6	4.3	19.4
Particulate (PM)	2.2	1.0	4.3
Carbon Monoxide (CO)	0.8	0.4	1.7

#### IV. Rule Applicability

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code.

The proposed source, a hot water generator, will be located in an area designated attainment for all criteria pollutants in accordance with Rule 17-2.420, FAC.

The Kennedy Space Center is a major emitting facility for sulfur dioxide, as defined in Rule 17-2.100, FAC, because potential emissions exceed 250 TPY.

The sulfur dioxide emissions that will be discharged from the proposed hot water generator are estimated to be 52 TPY. The sulfur dioxide emissions from the 13.7 MBtu/hr that will be replaced by the new generator are estimated to be 34 TPY. Therefore, the net emission increase of sulfur dioxide emissions as a result of this project will be 18 TPY which is less than the significant emission rate listed in Table 500-2 of Rule 17-2, FAC. Therefore, the project is exempt from the provisions of Rule 17-2.500, FAC, Prevention of Significant Deterioration.

The proposed source shall be permitted under Rule 17-2.520, FAC, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements and shall comply with Rule 17-2.610(2), FAC, General Particulate Emission Limiting Standards.

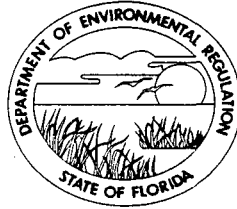
#### VI. Conclusions

Based on an evaluation of the application, the department concludes that compliance with related state air regulations will be achieved provided certain specific conditions are met.

The general and specific conditions are listed in the attached draft state permit (AC 05-093501).

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR

VICTORIA J. TSCHINKEL  
SECRETARY

**PERMITTEE:**

Kennedy Space Center  
Headquarters Building

Kennedy Space Center, FL 32899

Permit Number: AC 05-093501

Expiration Date: March 1, 1986

County: Brevard

Latitude/Longitude: 28° 35' 05" N/  
80° 39' 08" W

Project: Hot Water Generator

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work and operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a hot water generator with 25 MBtu/hr heat input located at Kennedy Space Center (VAB Annex Heat Plant) in Brevard County, Florida.

Construction shall be in accordance with the attached permit application except as otherwise noted on pages 5 and 6, Specific Conditions.

**Attachments:**

1. Application to Construct Air Pollution Sources, DER Form 17-2.122(16), received on September 20, 1984.

PERMITTEE:  
Kennedy Space Center

I. D. Number:  
Permit Number: AC 05-093501  
Expiration Date: March 1, 1986

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

PERMITTEE:  
Kennedy Space Center

I. D. Number:  
Permit Number: AC 05-093501  
Expiration Date: March 1, 1986

**GENERAL CONDITIONS:**

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:  
Kennedy Space Center

I. D. Number:  
Permit Number: AC 05-093501  
Expiration Date: March 1, 1986

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( ) Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

PERMITTEE:  
Kennedy Space Center

I. D. Number:  
Permit Number: AC 05-093501  
Expiration Date: March 1, 1986

**GENERAL CONDITIONS:**

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
- the date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling or measurements;
  - the date(s) analyses were performed;
  - the person responsible for performing the analyses;
  - the analytical techniques or methods used; and
  - the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

**SPECIFIC CONDITIONS:**

1. Except as required pursuant to these specific conditions, the proposed hot water generator construction shall be carried out in accordance with the statements in the application.
2. The sulfur content of the fuel oil to be burned in the proposed generator shall not exceed 1.0 percent by weight, as determined by ASTM Method D-219. The fuel analysis reports of the oil used shall be recorded and these records shall be kept for a minimum of two years for regulatory agency inspection.

PERMITTEE:  
Kennedy Space Center

I. D. Number:  
Permit Number: AC 05-093501  
Expiration Date: March 1, 1986

SPECIFIC CONDITIONS:

3. The visible emissions from the proposed generator shall not exceed 20% opacity, six (6) minute average. DER Method 9 (17-2.700(6)(a)9, FAC) shall be used for the performance test conducted by the permittee.
4. The test of visible emissions shall be accomplished at 90 to 100 percent of the design capacity. The permittee shall notify DER's St. Johns River District Office 14 days prior to the compliance test.
5. No. 6 fuel oil<sup>H</sup> consumption in this hot water generator shall not exceed 166 GPM and 657,000 gallons per year.
6. The permit to operate the existing No. 2 generator (AO 05-35275) shall be surrendered to the St. Johns River District prior to placing the new hot water generator in service.
7. A complete operation permit application, with a compliance test and oil analysis report, shall be submitted to the St. Johns River District office 90 days prior to expiration of the construction permit.

Issued this \_\_\_ day of \_\_\_\_\_, 1984

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION

---

VICTORIA J. TSCHINKEL, Secretary

\_\_\_ pages attached.



No. 0155787

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)

SENT TO		Mr. Peter Minderman
STREET AND NO.		
P.O., STATE AND ZIP CODE		
POSTAGE		\$
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢
	SPECIAL DELIVERY	¢
	RESTRICTED DELIVERY	¢
	OPTIONAL SERVICES	
	RETURN RECEIPT SERVICE	
	SHOW TO WHOM AND DATE DELIVERED	¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES		\$
POSTMARK OR DATE		12/11/84

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1979	SENDER: Complete items 1, 2, and 3. Add your address in the "RETURN TO" space on reverse.	
	1. The following service is requested (check one.)	
	<input checked="" type="checkbox"/> Show to whom and date delivered. .... ¢	
	<input type="checkbox"/> Show to whom, date and address of delivery. .... ¢	
	<input type="checkbox"/> RESTRICTED DELIVERY Show to whom and date delivered. .... ¢	
	<input type="checkbox"/> RESTRICTED DELIVERY. Show to whom, date, and address of delivery. \$ _____	
(CONSULT POSTMASTER FOR FEES)		
2. ARTICLE ADDRESSED TO:		
Mr. Peter Minderman NASA, KSC Headquarters Bldg. Kennedy Space Center, FL 32899		
3. ARTICLE DESCRIPTION:		
REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0155787	
(Always obtain signature of addressee or agent!)		
I have received the article described above.		
SIGNATURE <input type="checkbox"/> Addressee <input checked="" type="checkbox"/> Authorized agent		
<i>Cindy L. Hayes</i>		
4. DATE OF DELIVERY	POSTMARK	
14 Dec. 1984		
5. ADDRESS (Complete only if requested)		
6. UNABLE TO DELIVER BECAUSE:	CLERK'S INITIALS	

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL